



## **OPERATOR'S MANUAL**

ZEETER

422 & 424

#### **IMPORTANT**

The Dixon ZTR mower is both easy and fun to operate. However, any power mower must be operated properly to be safe. It is not a toy or a recreational vehicle. Before you start to use the mower, read the operator's manual carefully, and become completely familiar with the controls. Your Dixon dealer will gladly provide a checkout ride, and answer any questions.

#### READ CAREFULLY

You have purchased a top quality lawn mower that has been carefully inspected and adjusted at the factory. This lawn mower is warranted for 1 year from date of delivery against all defects in materials and workmanship. Lawn mowers used for commercial service are warranted for 30 days from date of delivery. SEE YOUR DEALER FOR WARRANTY SERVICE OR PARTS.

#### **ONE-YEAR LIMITED WARRANTY**

This lawn mower is warranted for one (1) year from date of delivery against all defects in materials and workmanship. Lawn mowers used for commercial service are warranted for 30 days from date of delivery. (Lawn mowers other than those used

only at residence of owner are considered as commercial service.)

Each new mower is warranted against manufacturing defects in material and workmanship under normal use and service. Our obligation, under this warranty, shall be limited to the replacement to the original retail purchaser of any part or parts, which, within the warranty period, shall be shown to be defective due to faulty workmanship or materials at the factory. All parts claimed defective must be returned to the factory for inspection, repair, or replacement with transportation charges prepaid.

This warranty does not apply to damage in transit or damage caused by misuse, negligence or accident, to alterations or repairs done outside the factory or authorized service stations, nor does it obligate us to assume any transportation charges

in connection with the replacement of parts claimed to be defective.

Our warranty does not apply to the blades, adapters, chains or belts on our mowers due to the very nature of the function

they perform and to the elements they are exposed to.

The warranty specifically excludes engines, tires, and batteries which are warranted separately by their respective manufacturers. All claims for defective engines or engine parts must be made in accordance with the engine manufacturer's warranty.

We reserve the right to make changes in design and changes or improvements on our product without imposing any

obligation upon ourselves to install the same on products heretofore manufactured.

This warranty is null and void if any parts .other than original manufacturer's parts are used. There is no other express

IMPLIED WARRANTIES, including those of merchantability and fitness for a particular purpose, are limited to one (1) year from purchase-and, to the extent permitted by law, any and all implied warranties are excluded.

#### **SERIAL NUMBERS**

The lawn mower has three serial numbers:

Mower Number — Located on frame at right rear transaxle mount. Transaxle Number — Located on transaxle. Engine Number — Located on engine. When referring to serial number on Warranty Registration, etc., use Mower Serial Number located on frame.

#### **SAFETY INSTRUCTIONS**

#### **BEFORE MOWING**

- Read these safety instructions and engine manufacturer's operating and maintenance instructions that are furnished with the mower.
- Discuss proper maintenance with your Dixon dealer, to save money and prevent injury. Consult your dealer before removing any parts.
- Don't allow anyone to operate your Dixon mower without proper instruction. Young children should never be allowed to operate any power mower, riding or walking.
- 4. Before mowing, pick up all debris particulary stones and sharp objects.
- 5. Before starting the engine, make sure the gas cap is in place.

#### **DURING MOWER OPERATION**

- The revolutionary Dixon mower attracts many admiring neighbors. But when mowing, all persons — especially children — and pets should be cleared from the mowing area.
- Wear appropriate, safe clothing when mowing — close-fitting jeans or slacks and heavy leather or safety shoes with rough soles. Never use any kind of mower with bare feet or open sandals, not even an old push-type model!
- 3. When grass is wet or slippery, do not use any riding mower.
- 4. Always mow at the slowest speed that will cut satisfactorily.
- 5. Keep hands and feet away from the blade at afl times.
- 6. Although the Dixon mower is equipped with a missile

- deflector which directs downwards all bladepropelled objects, keep persons clear of the discharge chute. Do not operate mower unless deflector is in place.
- 7. Use extreme caution when mowing hills or slopes with any mower.
- Always disengage blades before taking the mower across walks or objects that project above the surface.
- 9. When the mower is not in use, turn the engine off; never leave the engine running unattended. Your Dixon mower is equipped with a weight-sensitive switch that kills the engine when operator leaves the seat while blades are engaged. Test this important safety feature before each time mower is used. This may be done by starting engine, engaging blades and then rising slightly from seat. If engine does not stop, see your dealer for necessary repair.
- Before adjusting your mower or adding fuel, turn the engine off. Let it cool, and disconnect the spark plug so the engine cannot start by accident. Be sure all moving parts are stopped.
- 11. Never run the engine indoors; the fumes are dangerous.
- 12. Before backing your Dixon mower, stop, turn around, and look.
- Gasoline fumes are explosive; use only approved gasoline containers to store small amount of fuel. No special oil/gas mixtures are needed for your Dixon mower.
- 14. If the mower should start vibrating, stop the engine immediately and check for damage or loose parts. Vibration is usually the warning of trouble.
- 15. Never lift lawn mower by the body; lift only by the frame.
- 16. Never carry passengers.

ALWAYS SET PARKING BRAKE AND DISENGAGE BLADE OPERATION BEFORE DISMOUNTING.

## IMPORTANT OPERATING INSTRUCTIONS

Dixon ZTR mowers offer a new concept in mowing, providing unique maneuverability and ease. The following procedures will allow one to become familiar with the unique method of control very easily.

- SET PARKING BRAKE Be sure that drive levers are free and in the neutral position. (When drive levers are released, they should return to neutral position.)
- "Blade Operation" lever is to be set in the "Disengage" position.
- 3. Move throttle control to "Choke" position.
- 4. To start models with electric starting, simply insert ignition key and turn to the far right position. When the engine starts, release the ignition key and it will remain in the "RUN" position. To stop the engine simply turn the key to the "OFF" position.
  - NOTE: Some electric start models are also equipped with manual start provision. To start engine manually turn switch to "RUN" and pull the starter rope.
- 5. Set engine to desired speed by adjusting throttle control. (Suggest set at slow speed during initial operation.)
- NOTE SAFETY FEATURE: Safety switches stop engine when operator leaves seat while blades are engaged, and engine cannot be started when blades are engaged. OPERATOR SHOULD TAKE PRECAUTIONS AND NOT RELY ON SAFETY SWITCHES.
- This unit is equipped with a unique transaxle that requires only two drive levers to control braking, turning, direction and acceleration. TO GO FORWARD

From neutral position gently push both drive levers forward; to increase speed move levers further forward.

#### TO GO BACKWARD

From neutral position gently pull both drive levers

rearward.

#### **TURNING**

Turning is controlled by moving one drive lever slightly forward or rearward of the other. To turn left, move left lever rearward of right lever. To turn "square corners" move lever of desired direction to neutral. To turn on mower's own axis (Zero Radius) reduce speed and move one lever to reverse position and the other to forward position.

#### **BRAKING**

To brake mower, move both levers in direction opposite of travel, release levers to neutral, set parking brake. When stopping on incline, it may be necessary to hold slight pressure on levers in direction opposite of slope, until parking brake is set.

## ALWAYS SET PARKING BRAKE BEFORE DISMOUNTING.

#### **INITIAL OPERATION**

It is recommended that first operation of mower be done at a slow throttle setting with mower blades disengaged u ntil operator is thoroughly familiar with the unit.

You may have a tendency to "over control" mower at first. Slight movement — fingertip control — is all that's necessary for easy operation.

- 8. Mower Blade operation:
  - Cutting height is set by positioning the adjustment lever. Push button knob on top of lever, set desired cutting height, lock in to position by releasing button knob.
  - To start mower blades, move lever on floor to "engage" position. To stop mower blades, move lever to "disengage" position.

## ALWAYS DISENGAGE BLADE OPERATION BEFORE DISMOUNTING.

9. Parking Brake:

Parking brake is on right hand side of floor area and is engaged by pushing full forward with foot. To disengage, pull lever back toward operator by hand. In emergency situations, brake may be used in conjunction with the natural braking of the transaxle by applying pressure with foot. Always set parking brake before dismounting. Be sure that parking brake is disengaged before moving.

#### **MAINTENANCE**

BEFORE PERFORMING ANY MAINTENANCE, SHUT OFF ENGINE, ALLOW TO COOL AND DISCONNECT SPARK PLUG.

#### **ENGINE**

For complete engine operating and maintenance information, refer to engine operating and maintenance instructions furnished by the engine manufacturer and supplied with each mower.

#### **BATTERY**

Procedure for initial activation of battery:

- 1. Fill with electrolyte solution to lower ring of battery.
- 2. Let stand for 30 minutes.
- 3. Charge at 4 amps for 3 hours or 1 amp for 12 hours.
- 4. After initial filling, fluid level may be maintained with distilled water.

Procedure for off-season storage:

- Charge battery.
- Disconnect cables from battery terminals. Identify cables so that they may be easily reconnected to -the correct

- terminal. (See also wiring diagram shown on Body Assembly illustration.)
- 3. Clean top of battery and terminals.
- 4. Do not remove battery from mower.
- To reactivate, reconnect cables to correct terminals and charge battery if needed.

#### **BELT ADJUSTMENT**

The best tension for a V-belt drive is the lowest tension at which the belts will not slip under normal load condition. Check the tension on a new belt frequently during first hours of operation and every 10-15 hours or monthly thereafter. Too much tension shortens belt and bearing life. Too little tension causes slippage and loss of power. Be sure that belts and pulleys are kept free of foreign material. If belt slippage occurs, tighten it just enough to prevent slippage.

#### TRANSAXLE DRIVE BELT

To adjust tension, loosen 4 bolts which hold engine to mount and belt keeper in place. Loosen tension bolt located at rear of machine. Adjust tension bolt until desired tension is achieved, tighten 4 bolts holding engine and tighten tension bolt lock nut.

#### MOWER DRIVE BELT

Belt tension for mower drive belt is adjusted by loosening nut on mower deck turnbuckle assembly and turning turnbuckle to achieve desired tension. Retighten nut. Tension should be checked with belt in engaged position.

REPLACE BELTS WHEN ADJUSTMENT CAN NO LONGER BE MADE SATISFACTORILY OR IF BELTS BECOME WORN.

#### **BODY REMOVAL**

#### A. ZTR-424 Body Removal

- 1. Disconnect throttle cable from engine.
- 2. Disconnect key switch wire loom from frame wire loom at front of body.
- 3. Disconnect seat switch wire loom from frame wire loom. This connection is located approximately level with the back of the seat on left hand side of frame under the body.
- 4. Remove four control lever bolts and remove upper control levers.
- 5. Remove engaging handle by removing bolt and nut

under handle. - 6. Disconnect brake pedal from pedal arm by removing

the two bolts. 7. Remove two acorn nuts on front floor and the two sheet

metal screws in transaxle body mount. Body will lift

clear. To replace body reverse the above procedure.

#### B. ZTR-422 Body Removal

- 1. Disconnect throttle cable from engine.
- Disconnect two wire loom plugs, one going to engine wires and one going to switch. Plugs are located between back of transaxle mount and battery.

OMIT STEP (3) AND FOLLOW ZTR-424 BODY REMOVAL INSTRUCTIONS FROM STEP (4) ON. REMEMBER TO REINSTALL SWITCH GROUND WIRE ON LEFT REAR TRANSAXLE BODY MOUNT SCREW.

#### **CHAIN DRIVES**

#### **ADJUSTMENT**

To adjust the drive chains, the body must be removed and shims added behind the transaxle. Loosen 4 bolts which hold the transaxle to the frame. Insert shims as needed for adjustment between transaxle and mount plates. When properly adjusted, the slack span at the mid-point of the chain should have a total possible movement perpendicular to the chain of about 9/16". Tighten the 4 bolts which hold the transaxle to the frame. Replace chain when rollers become loose, chain breaks, or chain fails to operate properly.

#### LUBRICATION

- Chains: Proper lubrication is important for effective roller chain operation. Use high quality lubricating oil (do not use grease or extra heavy oil) and apply drops of oil to the chain joints every 10-15 hours of operation.
- Front Caster Assembly. Each caster assembly has a grease fitting located on the under side of the bearing. For best results, use any good multi-purpose grease every 10-15 hours of operation.
- 3. All other Bearings: All other bearings on your mower are sealed and require no lubrication.

#### WHEELS AND TIRES

Correct tire pressure is essential to the correct operation of the machine. The correct pressure for the drive tires is 8-10 lbs. The front tires should be inflated to 20-24 lbs. Lug nuts should be checked periodically.

#### **ELECTRICAL SYSTEMS**

Keep all connections clean and tight. Maintain the fluid in the battery at correct level.

#### BODY

The body may be washed with a mild detergent and waxed with any automotive type wax.

#### **TRANSAXLE**

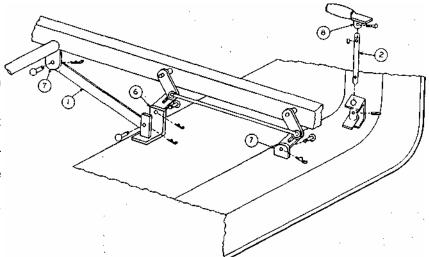
For adjustment or repair confer with authorized Dixon dealer service department. Adjustment or repair by other than authorized dealer voids warranty.

#### **SPARE PARTS**

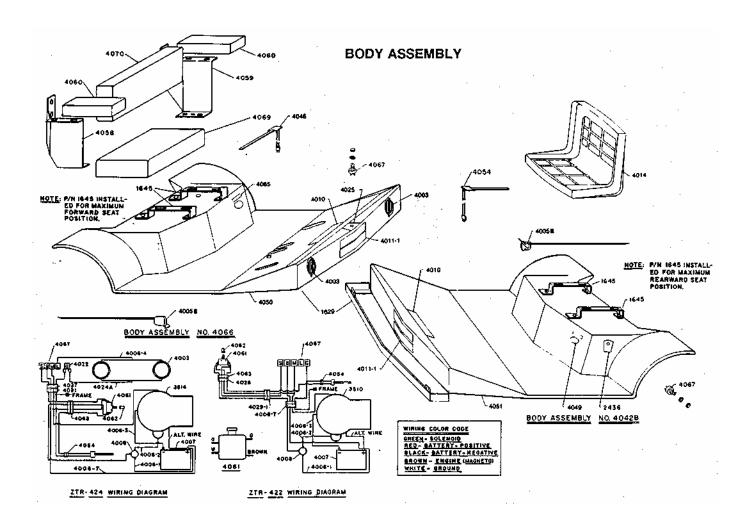
See your dealer for ordering spare parts or warranty service.

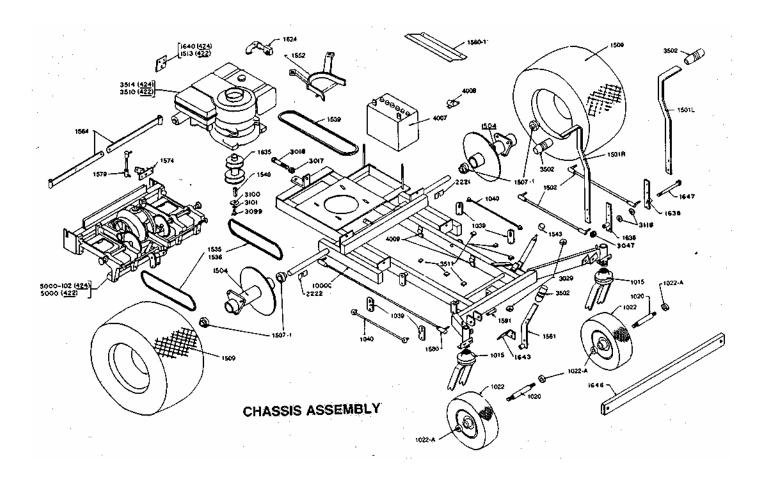
#### INSTALLING AND REMOVING MOWER DECK FROM FRAME

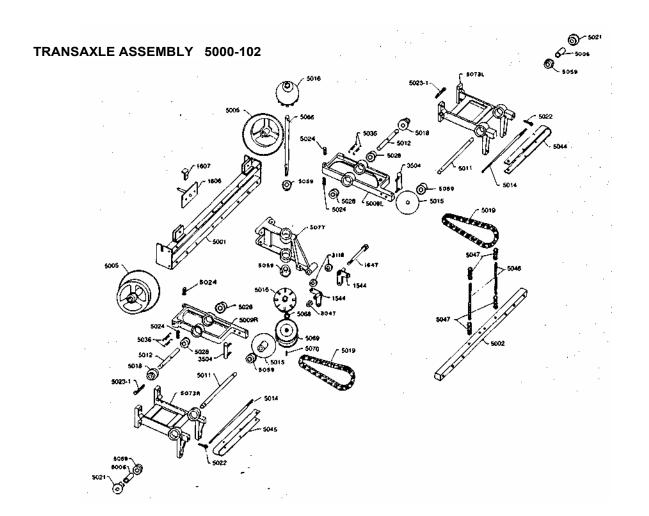
- Attach stabilizer arms to mower deck with pins and clips-as shown on drawing.
- 2. Attach the ½ " dia. engaging rod with a rollpin through the engaging cam.
- 3. Position the drive belt on pulleys.
- 4.Place mower deck under unit in approximate operating position with engaging rod through hole in the floor.
- Connect drive belt to lower engine pulley, being certain that belt is inside of belt guides. Loosen belt keeper by loosening the two rear engine mount bolts; this will allow belt to be placed on motor pulley. Retighten engine mount bolts.
- Attach lift linkage to mower deck on the inside of the attaching lugs as shown on drawing with pins and clips. (4 places)
- Attach stabilizer arms to pivot point on the inside of attaching bracket with pins and clips.
- 8. Place engaging handle on engaging rod and fasten with bolt and locknut.
- 9. Connect pan wire loom plug to plug on frame wire loom. Mower will not start unless this connection is made.

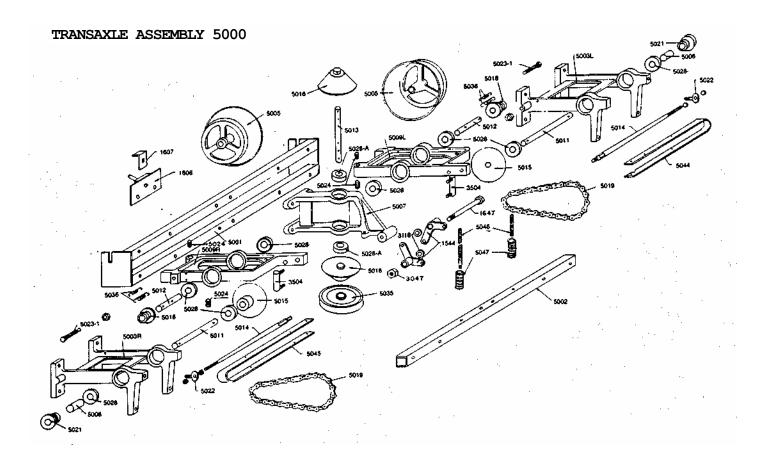


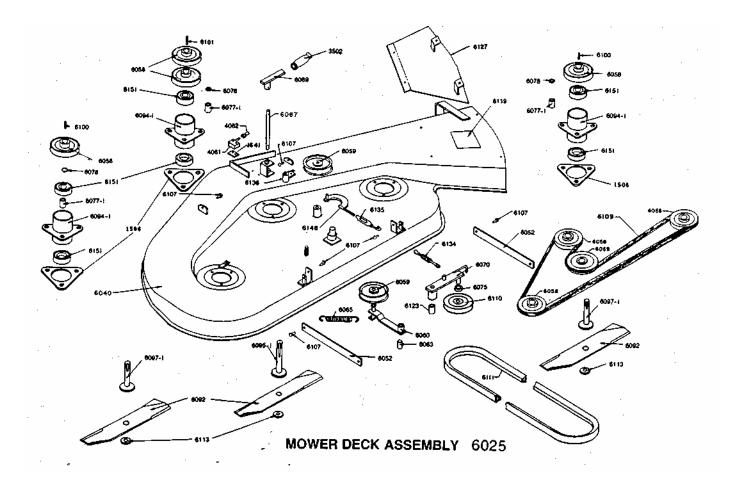
After installing pin clips, rotate pins so that open end of clip is down.











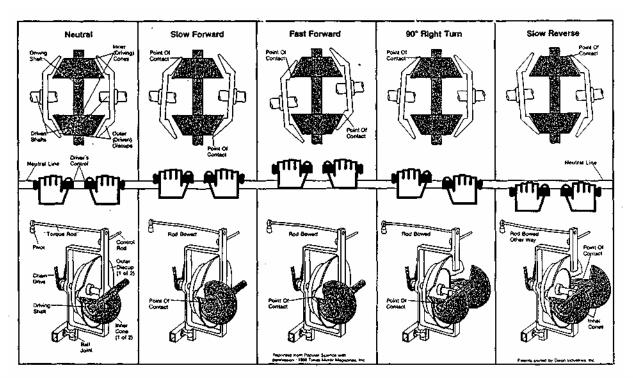
PARTS LIST FOR 42" MODELS Part No. Name	Part No. 1629 Bumper V	Veldment 3	<b>Part No.</b> 3105 HI 3106 HI	Name D <sup>1</sup> / <sub>4</sub> ' x 1 <sup>1</sup> / <sub>4</sub> " Spirol Pin (not shown) D <sup>1</sup> / <sub>4</sub> 'x 1" Spirol Pin (not shown)
1000C Frame Weldment		·go · ao j		
1015 Caster Weldment	1636 Bellcrank			D <sup>1</sup> / <sub>4</sub> " x 1 <sup>1</sup> / <sub>2</sub> " Spirol Pin (not shown)
1020 Caster Axle		· · · · · · · · · · · · · · · · · · ·		visc Spring
1020 Caster Axie 1022 Caster Wheel & Tire				and Grip
1022A Caster Wheel Bearing	1641 Pan Switc			louble Ball Joint
1039 Lower Lift Link	1643 Brake Per			loor Pad - Long (not shown)
1040 Lift Tie Rod Weldment		,		loor Pad - Short (not shown)
1501R Upper Control Lever R	1646 Weight Br			dhesive Bumper
1501L Upper Control Lever L	1647 Control Pi			leadlight Assembly, ZTR-424 hrottle Cable
1502 Control Rod Assembly				
1503 Wheel Hub Assembly		5		attery - Solenoid Cable solenoid Starter Cable
1504 Wheel Hub		/		" Ground Wire
1506 Hub Flange	^	,		leadlight Switch Wire, ZTR-424
1507-1 Wheel/Hub Bearing	, -	3		Rear Wire Loom, ZTR-422
1509 Rear Wheel & Tire				2 Volt Battery
1513 Tension Plate 8 h.p.				olenoid
1535 Drive Chain		===:::::		/ire Clip (not shown)
1536 Chain Connecting Link				control Decal, ZTR-424
1539 Transaxle Drive Belt	3029 Front Gro	op		lame Decal, DIXON
1540 Engine Shaft Key				Seat - ZTR-422
1543 Lift Knob				Seat Assembly, ZTR-422 (includes 4054)
1544 Bellcrank Assembly				Fround Terminal ZTR-421/424
1552 Belt Keeper Weldment				leadlight Ground Wire, ZTR-421/424
1560-1 Battery Splash Guard				witch Decal, ZTR-424
1564 Brake Arm Weldment				rame Wire Loom, ZTR-422
1574 Brake Pivot Weldment	3057 <sup>3</sup> / <sub>8</sub> " Std. F			witch Loom, ZTR-422
1579 Short Brake Rod				eat Switch Wire Loom, ZTR-424 (not shown)
1580 Long Brake Rod				Frame Wire Loom, ZTR-424
1581 Brake Pedal Arm Weldment		cotter (not shown) 4		witch Loom, ZTR-424
1591 Brake Pedal Pin				eat Switch Assembly, ZTR-424
1606 Brake Mount Weldment				ecal, ZTR-422
1607 Brake Stop	3101 <sup>7</sup> / <sub>16</sub> " Locky	vasher 4		ody, ZTR-424
1624 Oil Drain Assembly	710 20011			•

Part No. Name 4051 Body, ZTR-422 4054 Seat Switch Assembly, ZTR-422 4058 Arm Rest Bracket R, ZTR-424 4059 Arm Rest Bracket L, ZTR-424 4060 Arm Rest 4061 Pan Switch 4062 Switch Boot 4063 Pan Loom 4065 Decal, ZTR-424 4067 Ignition Switch 4067A Switch Key (for 4067) 4069 Seat Bottom, ZTR-424 4070 Seat Back, ZTR-424 4071 Seat Assembly, ZTR-424 4072 Wiring Kit, ZTR-422 4074 Wiring Kit, ZTR-422 5000 Transaxle, ZTR-424 5001 Rear Tube Assembly 5002 Front Tube 5003R Support R, ZTR-422 5004L Support Assembly R ZTR-422 5004L Support Assembly L, ZTR-422 5009R Cradle R 5009L Cradle L 5010R Cradle Assembly L 5011 Support Shaft	Part No. Name 5014 Torque Rod 5015 24 T Sprocket 5016 Moulded Cone (each) 5018 9 T Sprocket - Narrow 5019 Transaxle Chain 5021 9 T Sprocket - Wide 5022 Thumbscrew 5023-1 Pivot Bolt 5024 Cradle Spring 5025 Cone Frame Assembly, ZTR-422 5028 Transaxle Bearing 5028A Notched Bearing, ZTR-422 5035 Transaxle V-Pulley, ZTR-422 5036 Pivot Spring 5044 Torque Rod Stiffener L 5045 Torque Rod Stiffener R 5046 Positive Neutral Rod 5047 Positive Neutral Kit 5055 Torque Rod Stiffener Kit 5055 Torque Rod Stiffener Kit 5059 Double Bearing, ZTR-424 5061L HD Support Assembly R, ZTR-424 5061L HD Support Assembly L, ZTR-424 5066 HD Cone Frame Assembly, ZTR-424 5069 HD Transaxle Pulley, ZTR-424 5060 Transaxle Key, ZTR-424 5073 HD Support R, ZTR-424 5073 HD Support R, ZTR-424 5073 HD Support L, ZTR-424	Part No. Name 6058 V-Pulley 6059 Flat Idler Pulley 6060 Serpentine Idler Weldment 6063 <sup>5</sup> / <sub>8</sub> " OD x <sup>3</sup> / <sub>8</sub> " ID Bronze Bushing 6065 Serpentine Idler Spring 6070 Engaging Idler Weldment 6075 Engaging Idler Spacer 6077-1 Bearing Spacer (use w/6094-1) 6078 Pulley Spacer 6087 Engaging Rod 6089 Engaging Handle 6092 Mower Blade 6093-1 Outer Hub Assembly 6094-1 Deck Hub Casting 6095-1 Center Shaft 6100 Outer Shaft Key 6101 Center Shaft Key 6101 Center Hub Assembly 6109 V-Belt 6110 V-Idler Pulley 6111 Deck Drive V-Belt 6113 Blade Washer 6119 Caution Decal 6123 Engaging Idler Stud Bushing 6127 Deflector Weldment 6134 Engaging Spring 6135 <sup>5</sup> / <sub>16</sub> " Turnbuckle 6136 Engaging Cam Weldment
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#### **OWNER INFORMATION**

Date Mower Purchased	Mower Model Number		
Mower Purchased from			
	dealer name & address		
Mower Serial Number	Transaxle Serial Number		
Oil changed this date:			
1	4		
2			
3	6		
English and the date			
Engine tuned this date:			
1			
2	4		

# The Amazing Transaxle!





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